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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,565	01/23/2006	Tomohide Banba	UNIU79.064APC	2113

20995 7590 11/26/2008  
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EXAMINER
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USELDING, JOHN E

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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11/26/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com  
eOAPilot@kmob.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,565	<b>Applicant(s)</b> BANBA ET AL.	
	<b>Examiner</b> JOHN USELDING	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-8,10-14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-8,10,11 and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6-8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakawa et al. (4,557,856).

Regarding claim 1: Miyakawa et al. teach a composition comprising silica powder (column 6, lines 11-18) and a binder resin that has a carboxyl content such that the acid value is 1 to 30 or 5-20 (column 7, lines 24-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select one of the many resins that are taught that are (meth)acrylic (column 6, line 64-68, column 8, lines 36-50). The composition also can comprise phosphoric acid, which is a preferred acid (column 5, lines 41-58).

Regarding claim 2: Miyakawa et al. fail to teach a molecular weight for their polymer binder but it is obvious to one of ordinary skill to modify the amount of monomer used in making the polymer to obtain a desired molecular weight. It is a result effective variable. See MPEP 2144.05.

Regarding claim 6: Miyakawa et al. teach that the ratio of phosphoric acid(A)/silica powder(B) ratio is preferably from 5/100 to 50/100 (column 8, lines 52-57). They also teach that the binder is used 10 to 500% by weight based on (A) and (B).

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The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that choosing the overlapping portion, of the range taught in the prior art and the range claimed by the applicant, has been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 USPQ 549.

Regarding claims 7 and 8: silica powder is glass powder. Miyakawa et al. teach the silica powder Aerosil, which intrinsically meets the viscosity limitation.

Regarding claim 10: Miyakawa et al. teach that their composition can form a film in sheet form (column 9, line 58 to column 10, line 27).

Regarding claim 11: Miyakawa et al. also teach that the composition can be used to make a metal-laminated paper (column 13, lines 56-61).

Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakawa et al. (4,557,856).

Regarding claims 16 and 17: Miyakawa et al. teach a composition comprising silica powder (column 6, lines 11-18) and a binder resin that has a carboxyl content such that the acid value is 1 to 30 or 5-20 (column 7, lines 24-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select one of the many resins that are taught that are (meth)acrylic (column 6, line 64-68, column 8, lines 36-50). The composition also can comprise phosphoric acid, which is a preferred acid (column 5, lines 41-58). Miyakawa et al. teach that the ratio of phosphoric acid(A)/silica powder(B) ratio is preferably from 5/100 to 50/100 (column 8,

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lines 52-57). They also teach that the binder is used 10 to 500% by weight based on (A) and (B). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that choosing the overlapping portion, of the range taught in the prior art and the range claimed by the applicant, has been held to be a *prima facie* case of obviousness, see *In re Malagari*, 182 USPQ 549.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakawa et al. (4,557,856) as applied to claim 17 above further in view of Fukuda et al. (5,827,792).

Regarding claim 18: Miyakawa et al. teach that they are open to using any inorganic powder that contains silica, alumina, or aluminosilicate compounds (column 6, lines 1-4). Miyakawa et al. fails to teach an inorganic powder that has a softening point of 400 to 650°C. However, Fukuda et al. teach an inorganic powder containing alumina that has a softening point of 100°C to 500°C (column 2, lines 26-37). They teach a particular embodiment that contains alumina and has a softening point of 650°C (Table 4). Since Miyakawa et al. are open to any alumina powder it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the inorganic powder of Fukuda et al. as the inorganic powder of Miyakawa et al. because it is a simple substitution of one known element for another to obtain predictable results.

### ***Response to Arguments***

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Applicant's arguments with respect to claims 1, 2, 6-8, 10-11, and 16-18 have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN USELDING whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/  
Supervisory Patent Examiner, Art Unit 1796

John Uselding  
Examiner  
Art Unit 1796